Illinois Department of Transportation
2300 South Dirksen Parkway / Springfield, Illinois / 62764

June 5, 2020

SUBJECT: Route FAU 1296 & FAU 1297 (Central Avenue & Wilmette Avenue)
Section 16-00199-00-RS (Wilmette)
Cook County
Contract No. 61G42
Item 004
June 12, 2020 Letting
Addendum A

NOTICE TO PROSPECTIVE BIDDERS:

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

1. **Revised the Schedule of Prices.**
2. **Revised sheets 4 – 18, 43 – 45, 76 – 79, 83 – 88, 90 – 96, 130, 136, 142 & 145 – 149 of the Plans.**
3. **Revised pages 2, 3, 4, 5 & 8 of the Special Provisions Index.**
4. **Revised page 1 of the BDE Special Provisions Check Sheet.**
5. **Added pages 40A – 40G, 256A – 256C & 286A – 286C to the Special Provisions.**
6. **Revised pages 57 – 59, 74 & 114 of the Special Provisions.**

Prime contractors must utilize the enclosed material when preparing their bid and must include any changes to the Schedule of Prices in their bid.

Very truly yours,

Jack A. Elston, P.E.
Bureau Chief, Design and Environment

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BDE SPECIAL PROVISIONS

The following special provisions indicated by an "X" are applicable to this contract. An * indicates a new or revised special provision for the letting.

	File Name	Pg.		Special Provision Title	Effective	Revised
*	80099			Accessible Pedestrian Signals (APS)	April 1, 2003	April 1, 2020
	80274			Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
	80192			Automated Flagger Assistance Device	Jan. 1, 2008	
	80173	257	X	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
	80246			Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	
	80241			Bridge Demolition Debris	July 1, 2009	
	5026I			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	5048I			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	5049I			Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	5053I			Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
	80425			Cape Seal	Jan. 1, 2020	
	80384	259	X	Compensable Delay Costs	June 2, 2017	April 1, 2019
	80198			Completion Date (via calendar days)	April 1, 2008	
	80199			Completion Date (via calendar days) Plus Working Days	April 1, 2008	
	80293			Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	July 1, 2016
	80311			Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
	80277			Concrete Mix Design – Department Provided	Jan. 1, 2012	April 1, 2016
	80261	263	X	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
	80387			Contrast Preformed Plastic Pavement Marking	Nov. 1, 2017	
	80029	266	X	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Mar. 2, 2019
	80402	276	X	Disposal Fees	Nov. 1, 2018	
	80378			Dowel Bar Inserter	Jan. 1, 2017	Jan. 1, 2018
	80405			Elastomeric Bearings	Jan. 1, 2019	
	80421	278	X	Electric Service Installation	Jan. 1, 2020	
	80415	280	X	Emulsified Asphalts	Aug. 1, 2019	
	80423	283	X	Engineer's Field Office Laboratory	Jan. 1, 2020	
	80388	286	X	Equipment Parking and Storage	Nov. 1, 2017	
	80229			Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
	80417			Geotechnical Fabric for Pipe Underdrains and French Drains	Nov. 1, 2019	
	80420			Geotextile Retaining Walls	Nov. 1, 2019	
	80304	286A	X	Grooving for Recessed Pavement Markings	Nov. 1, 2012	Nov. 1, 2017
	80422			High Tension Cable Median Barrier Reflectors	Jan. 1, 2020	
	80416			Hot-Mix Asphalt – Binder and Surface Course	July 2, 2019	Nov. 1, 2019
	80398	287	X	Hot-Mix Asphalt – Longitudinal Joint Sealant	Aug. 1, 2018	Nov. 1, 2019
*	80406			Hot-Mix Asphalt – Mixture Design Verification and Production (Modified for I-FIT Data Collection)	Jan. 1, 2019	Jan. 2, 2020
	80347			Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Nov. 1, 2014	July 2, 2019
	80383			Hot-Mix Asphalt – Quality Control for Performance	April 1, 2017	July 2, 2019
	80411			Luminaires, LED	April 1, 2019	
	80393	291	X	Manholes, Valve Vaults, and Flat Slab Tops	Jan. 1, 2018	Mar. 1, 2019
	80045			Material Transfer Device	June 15, 1999	Aug. 1, 2014
	80418			Mechanically Stabilized Earth Retaining Walls	Nov. 1, 2019	
	80424			Micro-Surfacing and Slurry Sealing	Jan. 1, 2020	
*	80428	293	X	Mobilization	April 1, 2020	
	80165			Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
	80412			Obstruction Warning Luminaires, LED	Aug. 1, 2019	
	80349			Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016
	80371	294	X	Pavement Marking Removal	July 1, 2016	
	80389	295	X	Portland Cement Concrete	Nov. 1, 2017	

Revised 6/4/20

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DUCTILE IRON WATER MAIN DIRECTIONAL DRILLING

General. This work shall include the furnishing of all labor and materials required for the construction of a water main of the required inside diameter constructed as specified herein and in the standard specifications, and conforming in all respects to the lines, grades, and locations shown on the plans or furnished by the ENGINEER.

Materials. Ductile iron pipe installed via horizontal directional drilling shall utilize U.S. Pipe's FIELD LOK 350® Gaskets or equivalent for joint restraint. The restraint provided shall be a boltless, integral restraining system and shall be rated for 350 psi in accordance with the performance requirements of ANSI/AWWA C111/A21.11. Ductile iron water mains shall conform to ANSI specifications A21.51, thickness Class 52, with cement lining conforming to specification A21.4 and shall be coated on the outside with coal tar or asphalt one mil in thickness. Coating: The exterior of ductile iron pipe shall be coated with a layer of arc-sprayed zinc per ISO 8179. The mass of the zinc applied shall be 200 g/m2 of pipe surface area. A finishing layer topcoat shall be applied to the zinc. The coating system shall conform in every respect to ISO 8179-1 "Ductile iron pipes - External zinc-based coating - Part 1: Metallic zinc with finishing layer. Second edition 2004-06-01." Joints shall be push-on conforming to ANSI specification A21.11. All gaskets for push-on and mechanical joints must be lubricated prior to installation. Also included shall be a polyethylene tube to encase the entire water main conforming to ASTM A 21.5. Conductivity will be maintained by installing bronze wedges into the push joints. VITON GASKETS or equivalent shall be used for water main installed from STA 106+50 to 113+50.

Work Included. The work specified in this section consists of furnishing and installing underground utilities using the horizontal directional drilling (HDD) method of installation, also commonly referred to as directional boring or guided horizontal boring. This work shall include all services, equipment, materials, and labor for the complete and proper installation, testing, restoration of underground utilities and environmental protection and restoration.

Quality Assurance. The requirements set forth in this document specify a wide range of procedural precautions necessary to ensure that the very basic, essential aspect of a proper directional bore installation are adequately controlled. Strict adherence shall be required under specifically covered conditions outlined in this specification. Adherence to the specifications contained herein, or the Engineer's approval of any aspect of any directional bore operation covered by this specification, shall in no way relieve the Contractor of their ultimate responsibility for the satisfactory completion of the work authorized under the Contract.

Submittals:

Work Plan. Prior to beginning work, the Contractor must submit to the Engineer a work plan detailing the procedure and schedule to be used to execute the project. The work plan should include a description of all equipment to be used, down-hole tools, a list of subcontractors, a schedule of work activity, a safety plan, an environmental protection plan and contingency plans

for possible problems. Work plan should be comprehensive, realistic and based on actual working conditions for this particular project. Plan should document the thoughtful planning required to successfully complete the project.

Equipment. Contractor will submit specifications on directional drilling equipment. Equipment shall include but not be limited to: drilling rig, mud system, mud motors (if applicable), down-hole tools, guidance system, and rig safety systems. Calibration records for guidance equipment shall be included. Specifications for any drilling fluid additives that Contractor intends to use or might use will be submitted.

Material. Specifications on material to be used shall be submitted to Engineer. Material shall include the pipe, fittings and any other item which is to be an installed component of the project.

Equipment Requirements:

Work Included. The directional drilling equipment shall consist of a directional drilling rig of sufficient capacity to perform the bore and pullback the pipe, a drilling fluid mixing, delivery and recovery system of sufficient capacity to successfully complete the crossing, a drilling fluid recycling system to remove solids from the drilling fluid so that the fluid can be re-used, a guidance system to accurately guide boring operations, a vacuum truck of sufficient capacity to handle the drilling fluid volume, trained and competent personnel to operate the system. All equipment shall be in good, safe operating condition with sufficient supplies, materials and spare parts on hand to maintain the system in good working order for the duration of this project.

Drilling System:

Drilling Rig. The directional drilling machine shall consist of a hydraulically powered system to rotate, push and pull hollow drill pipe into the ground at a variable angle while delivering a pressurized fluid mixture to a guidable drill (bore) head. The machine shall be anchored to the ground to withstand the pulling, pushing and rotating pressure required to complete the crossing. The hydraulic power system shall be self-contained with sufficient pressure and volume to power drilling operations. Hydraulic system shall be free of leaks. Rig shall have a system to monitor and record maximum pull-back pressure during pull-back operations. The rig shall be grounded during drilling and pull-back operations. There shall be a system to detect electrical current from the drill string and an audible alarm which automatically sounds when an electrical current is detected.

Drill Head. The drill head shall be steerable by changing its rotation and shall provide the necessary cutting surfaces and drilling fluid jets.

Mud Motors (if required). Mud motors shall be of adequate power to turn the required drilling tools.

Drill Pipe. Shall be constructed of high quality 4130 seamless tubing, grade D or better, with threaded box and pins. Tool joints should be hardened to 32-36 RC.

Guidance System:

Magnetic Guidance System. A Magnetic Guidance System (MGS) or proven gyroscopic system shall be used to provide a continuous and accurate determination of the location of the drill head during the drilling operation. The guidance shall be capable of tracking at all depths up to one hundred feet and in any soil condition, including hard rock. It shall enable the driller to guide the drill head by providing immediate information on the tool face, azimuth (horizontal direction), and inclination (vertical direction). The guidance system shall be accurate to +/-2% of the vertical depth of the borehole at sensing position at depths up to one hundred feet and accurate within 1.5 meters horizontally. The Guidance System shall be of a proven type and shall be operated by personnel trained and experienced with this system. The Operator shall be aware of any magnetic anomalies on the surface of the drill path and shall consider such influences in the operation of the guidance system if using a magnetic system.

Drilling Fluid (Mud) System:

Mixing System. A self-contained, closed, drilling fluid mixing system shall be of sufficient size to mix and deliver drilling fluid. Mixing system shall continually agitate the drilling fluid during drilling operations.

Drilling Fluids. Drilling fluid shall be composed of clean water and appropriate additives clay. Water shall be from an authorized source with a pH of 8.5-10. Water of a lower pH or with excessive calcium shall be treated with the appropriate amount of sodium carbonate or equal. The water and additives shall be mixed thoroughly and be absent of any clumps or clods. No potentially hazardous material may be used in drilling fluid.

Delivery System. The delivery system shall have filters in-line to prevent solids from being pumped into the drill pipe. Connections between the pump and drill pipe shall be relatively leak free. Used drilling fluid spilled during drilling operations shall be contained and conveyed to the drilling fluid recycling system. A berm, minimum of 12" high, shall be maintained around drill rigs, drilling fluid mixing system, entry and exit pits and drilling fluid recycling system to prevent spills into the surrounding environment. Pumps and or vacuum truck(s) of sufficient size shall be in place to convey excess drilling fluid from containment areas to storage and recycling facilities.

Drilling Fluid Recycling System. The drilling fluid recycling system shall separate sand, dirt and other solids from the drilling fluid to render the drilling fluid re-usable. Spoils separated from the drilling fluid will be stockpiled for later use or disposal at the Contractor's expense.

Other Equipment:

Pipe Rammers. Hydraulic or pneumatic pipe rammers may only be used if necessary and with the authorization of Engineer.

Restrictions. Other devices or utility placement systems for providing horizontal thrust other than those previously defined in the preceding sections shall not be used unless approved by the Engineer prior to commencement of the work. Consideration for approval will be made on an individual basis for each specified location. The proposed device or system will be evaluated prior to approval or rejection on its potential ability to complete the utility placement satisfactorily without undue stoppage and to maintain line and grade within the tolerances prescribed by the particular conditions of the project.

Operations:

General. The Engineer must be notified 48 hours in advance of starting work. The Directional Bore shall not begin until the Engineer is present at the job site and agrees that proper preparation for the operation have been made. The engineer approval for beginning the installation shall in no way relieve the Contractor of the ultimate responsibility for the satisfactory completion of the work as authorized under the Contract. It shall be the responsibility of Engineer to provide observation personnel at such times as appropriate without causing undue hardship by reason of delay to the Contractor.

Personnel Requirements. All personnel shall be fully trained in their respective duties as part of the directional drilling crew and in safety. Each person must have at least three (3) years directional drilling experience. A responsible representative who is thoroughly familiar with the equipment and type of work to be performed, must be in direct charge and control of the operation at all times. In all cases, the supervisor must be continually present at the job site during the actual Directional Bore operation. The Contractor shall have a sufficient number of competent workers on the job at all times to insure the Directional Bore is made in a timely and satisfactory manner.

Drilling Procedure:

Site Preparation. Prior to any alterations to work-site, contractor shall photograph or video tape entire work area, including entry and exit points. One copy of which shall be given to engineer, and one copy is to remain with contractor for a period of one year following the completion of the project. Work site as indicated on drawings, within right-of-way, shall be graded or filled to provide a level working area. No alterations beyond what is required for operations are to be made. Contractor shall confine all activities to designated work areas.

Drill Path Survey and "Potholing". The contractor shall provide for "potholing" or excavation, if required, to locate existing service lines and utilities prior to installing water main through that segment. All such exploratory excavations shall utilize a vacuum truck to minimize disturbance to

the surface and the existing utilities. The Contractor shall properly dispose of all material removed shall be disposed of off-site. When paralleling other utilities within five (5) feet, potholing may be required along the utility every twenty-five (25) feet. The entire drill path shall be accurately surveyed with entry and exit stakes placed in the appropriate locations within the areas indicated on drawings. If contractor is using a magnetic guidance system, drill path will be surveyed for any surface magnetic variations or anomalies.

Environmental Protection. Contractor shall place silt fence between all drilling operations and any drainage, wetland, waterway or other area designated for such protection by contract documents, state, federal and local regulations. Additional environmental protection necessary to contain any hydraulic or drilling fluid spills shall be put in place, including berms, liners, turbidity curtains and other measures. Contractor shall adhere to all applicable environmental regulations. Fuel may not be stored in bulk containers within 200 feet of any water-body or wetland.

Safety. Contractor shall adhere to all applicable state, federal and local safety regulations and all operations shall be conducted in a safe manner. Safety meetings shall be conducted at least weekly with a written record of attendance and topic submitted to Engineer.

Pipe. Pipe shall be butt-fused together in one length. Pipe will be placed on pipe rollers before pulling into bore hole with rollers spaced close enough to prevent excessive sagging of pipe.

Pilot Holes. Pilot hole shall be drilled on bore path with no deviations greater than 5% of depth over a length of 100 feet. In the event that pilot does deviate from bore path more than 5% of depth in 100 feet, contractor will notify Engineer and the Engineer may require contractor to pullback and re-drill from the location along bore path before the deviation. In the event that a drilling fluid fracture, inadvertent returns or returns loss occurs during pilot hole drilling operations, contractor shall cease drilling, wait at least 30 minutes, inject a quantity of drilling fluid with a viscosity exceeding 120 seconds as measured by a March funnel and then wait another 30 minutes. If mud fracture or returns loss continues, contractor will cease operations and notify Engineer. Contractor shall provide sufficient silt fence, vacuum trucks or other means required to contain all mud and/or remove it from the site. No additional compensation will be allowed for containment or cleanup of mud fractures.

Reaming. Upon successful completion of pilot hole, contractor will ream bore hole to a minimum of 25% greater than outside diameter pipe using the appropriate tools. Contractor will not attempt to ream at one time more than the drilling equipment and mud system are designed to safely handle.

Pull Back. After successfully reaming bore hole to the required diameter, contractor will pull the pipe through the bore hole. In front of the pipe will be a swivel and reamer to compact bore hole walls. Once pull-back operations have commenced, operations must continue without interruption until pipe is completely pulled into bore hole. During pull-back operations, contractor will not apply more than the maximum safe pipe pull pressure at any time. The contractor shall install a test section of pipe, which will fail prior to damaging the water main or joint restraint, attached to

the front of the pull-back pipe. At no time shall the pull-back force exceed the maximum forces specified by the pipe or joint restraint manufacturer for the size and/or dimension ratio of pipe being installed. In the event that pipe becomes stuck, contractor will cease pulling operations to allow any potential "hydro-lock" to subside and will commence pulling operations. If pipe remains stuck, contractor will notify Engineer. Engineer and contractor will review available options and then work will proceed accordingly.

Testing. A two- hour test combining the pressure test and leakage test shall be made in accordance with sections 41-2.13A, 41-2.13B, 41-213B, AND 41-2.13C of the "Standard specifications for water and sewer main construction". The test pressure shall be 150 psi for a minimum of two (2) hours.

In addition, the CONTRACTOR shall conduct a system pressure leakage test after the two (2) hour test is completed. A twenty-four (24) hour metered leakage test shall be performed. The Village of Wilmette shall provide the meter and double check valve, and the CONTRACTOR shall provide the connection to the new main. The leakage test shall be performed at system pressure, and a maximum allowable leakage of four (4) gallons per inch diameter per 1,000 feet of pipe per twenty-four (24) hours shall be allowed as recorded on the meter. If excessive leakage is encountered, the location of the leak shall be located and repaired, and the twenty-four (24) hour system leakage test shall be repeated at no additional cost until the leakage is within the specified allowance.

No bell clamps are allowed during pressure testing.

Final Connections to Existing Mains. Water mains and appurtenances must be completely installed, flushed, disinfected, and satisfactory bacteriological sample results received prior to permanent connections being made to the active distribution system. Sanitary construction practices must be followed during installation of the final connection, so that there is no contamination of the new or existing water main with foreign material or groundwater.

a. *Connections equal to or less than one pipe length (<18 ft)*: New pipe, fittings, and valve(s) required for the connection may be spray-disinfected or swabbed with a minimum 1-5% solution of chlorine just prior to being installed, if the total length of the connection from the end of a new main to the existing main is equal to or less than 18 ft.
b. *Connections greater than one pipe length (>18 ft):* Pipe required for the connection must be set up aboveground, disinfected, and bacteriological samples taken, as described in Section 5 of AWWA C651-99 if the total length of the connection from the end of a new main to the existing main is greater than 18 ft. after satisfactory bacteriological sample results have been received for the "predisinfected" pipe, the pipe can be used in connecting the new main to the active distribution system. Between the time the satisfactory bacteriological sample results are received and the time that the connection piping is installed, the ends of the piping must be sealed with plastic wraps, watertight plugs, or caps.

Chlorination. Before being placed into service, all new water mains shall be chlorinated in accordance with Sections 41-2.14B, 41-2.14C, 41-2.14C(1), 41-2.14C(2), and 41-2.14D of the "Standard specifications for Water and Sewer Main Construction".

Method of Measurement and Basis of Payment. This work shall be paid for at the contract unit price per FOOT for DIRECTIONAL BORING of the size indicated on the plans and as specified herein, constructed as required, including, all in accordance with the requirements and provisions as outlined above and in the Standard Specifications.

2. Abrasive cleaners, brushes and steel wool should be avoided.
3. If the finish is marred by a sharp object and the steel is exposed take a fine abrasive material to the area to improve the adhesion of the primer and touch-up paint. A quality grade exterior metal primer and top coat of matching color enamel should then be applied over the prepared surface.

B. Granite Components
   1. Existing granite components shall be cleaned with a soft cloth and mild detergent.

C. Glass Components
   1. Existing glass sign cabinet faces shall be cleaned with a mild glass cleaner.

3.03 Installation
A. Paint aluminum cabinet surfaces with exterior grade paint.
B. Contractor shall ensure that functional mechanisms, such as the existing ventilation and locking mechanisms maintain their functions.
C. Install exterior grade decal in accordance with manufacturer's installation guidelines. Contractor shall ensure that decal is straight and flat to the surface. Bubbling and warping will not be accepted.

3.04 Protection
A. Protect installed kiosks until completion of project.

Method of Measurement. Refurbishing the information kiosk and all associated equipment and materials will be measured in place for each information kiosk.

Basis of Payment. Refurbishing the information kiosk will be paid for at the contract unit price per EACH for INFORMATION KIOSK.

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INTERIM COMPLETION DATES AND COMPLETION DATE PLUS WORKING DAYS

Listed are the Interim Completion Dates for this project:

- All water main and services shall be installed (fully operational) and trenches paved with temporary pavement patching (2" HMA) by December 15, 2020 to allow full Central Avenue roadway access for the winter.

- Substantial completion of Downtown Stages 1 and 2 by December 15, 2020 to allow full Central Avenue roadway access for the winter. Substantial completion will consist of completing major work items which shall include, but not be limited to, sewers, Festoon Lighting conduit and cabling, sewer work, curb and gutter, aggregate base courses, HMA binder course (no surface),

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sidewalks, temporary pavement markings, signing, temporary traffic signals in order to fully open Central Avenue to pedestrian and vehicular traffic from Green Bay Road to 11th Street.

- Substantial completion of Downtown Stages 3 and 4 by May 30, 2021 to allow full Wilmette Avenue access for the summer. Substantial completion will consist of completing major work items which shall include, but not be limited to, sewers, Festoon Lighting conduit and cabling, sewer work, curb and gutter, aggregate base courses, HMA binder course (no surface), sidewalks, temporary pavement markings, signing, temporary traffic signals in order to fully open Wilmette Avenue between Green Bay Road and Lake Avenue.

- Substantial completion of Post-Stage Downtown remaining streetscape which shall include, but not limited to, Festoon Lighting, landscaping and plantings, benches, wayfinding signs, HMA surface course, traffic signals and final pavement markings by June 30, 2021 to allow full downtown access for the summer.

- Substantial completion of Residential Section Stage 1 between 11th Street and Sheridan Road including storm sewer, curb and gutter, HMA binder course and sidewalk backfill to finish grade, and driveways, shall be completed by May 30, 2021.

- Substantial completion of Residential Section Stage 2 between 11th Street and Sheridan Road including storm sewer, curb and gutter, HMA binder course and sidewalk backfill to finish grade, and driveways, shall be completed by August 15, 2021.

- Substantial completion of Post-Stage Residential Section, which shall include HMA surface course and backfilling behind curbs in preparation for sod placement, shall be completed by August 30, 2021.

Revise Article 108.05 (b) of the Standard Specifications as follows:

"When a completion date plus working days is specified, the Contractor shall complete all contract items and safely open all roadways to traffic by 11:59 PM on September 30, 2021 except as specified herein.

The Contractor will be allowed to complete all clean-up work and punch list items within 10 working days after the completion date for opening the roadway to traffic. Under extenuating circumstances the Engineer may direct that certain items of work, not affecting the safe opening of the roadway to traffic, may be completed within the working days allowed for cleanup work and punch list items. Temporary lane closures for this work may be allowed at the discretion of the Engineer.

Article 108.09 or the Special Provision for "Failure to Complete the Work on Time", if included in this contract, shall apply to the interim completion dates, completion date and the number of working days.

LIGHT POLE SPECIAL

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Description: This work shall consist of furnishing and installing festoon light poles, stainless steel cables and string lights. Festoon light poles shall be Sternberg Oxford 6914.5 SRFT-16SF-BCC4/1SLL/1-GFI IUC/STD. Stainless steel cables shall be 3/16 in. x 125 Stainless steel wire rope, also identified as 7 x 19 wire rope. Wire rope is constructed of seven strands of nineteen wires. Rope is constructed of stainless steel and has a working load limit of 740 lbs. String lighting shall be Celestial Lighting Hydra STL Series, 120V Exterior LED Light String. Light strings shall include replaceable 120V medium-base LED lamps. Provide 1800K LED clear globes, spaced at 18" on center. Coordinate all foundation specifications, electrical wiring and controls with engineering specifications and documents. String lights shall be mounted with no drop, to stainless steel cable with black cable ties. Each festoon pole will include a duplex GFI receptacle with weatherproof in use cover. This work shall be coordinated with electrical utility improvements as defined in the engineering project documents and paid for separately.

Wiring and Appurtenances: The work shall include all wiring, receptacles, and connections within the pole and shall be per the detail for the "South Plaza String Lighting Handhole Wiring Diagram" shown in the plans.

Submittals: Provide shop drawings and product data for all specified products.

Materials: All materials shall be in accordance with the contract plan drawings and Sections 1065, 1066, 1067, and 1069 of the Standard Specifications.

Construction Requirements: All work shall be installed in accordance with Sections 821 and 830 of the Standard Specifications.

The Contractor shall be responsible for coordinating the proposed bolt circle diameter, anchor bolt size, and handhole orientation for the proposed light poles installed.

Work to be performed under this pay item is indicated in contract plan drawings and shall be in conformance with NEC, IDOT and local ordinances.

Method of Measurement: The work to install the Light Pole, Special will be measure per each.

Basis of Payment: This work shall be paid for at the contract unit price per EACH for LIGHT POLE, SPECIAL which price shall include the pole, wiring, receptacle, and for all materials, labor and equipment necessary to perform the work as here in specified.

Concrete foundation for the Light Pole, Special shall be measured separately for payment as CONCRETE FOUNDATION, TYPE A.

1

PVC CASING PIPE 20"

Description. The work of this Pay Item consists of installing a C-900 PVC casing pipe around the proposed 8" or 10" water main to protect the proposed water main underneath the existing storm/sanitary sewers by open cut method; saw cutting, and removal and disposal of existing pavements; removal and disposal of waste excavated materials; protection, repair or replacement of utilities, installation of casing, installation of pipe within casing, sand filling of void between casing and carrier pipes, end seals, and testing.

This Pay Item does not include the pipe within the casing, which is paid for under separate Pay Items.

Measurement. The work will be measured in lineal feet for the actual length of the casing pipe installed.

Basis of Payment. The work will be paid for at the contract unit price per FOOT for PVC CASING PIPE 20".

STREETSCAPE CONSTRUCTION PREQUALIFICATION

Qualifications. At the time of the preconstruction conference, the Contractor shall provide the following documentation.

References. A list containing at least three projects completed within the previous eight years prior to this project's bid date, which the Contractor(s) performing this work have successfully completed. The projects shall include work within active commercial areas, quality concrete, decorative lighting, wayfinding signage, site furnishings and landscape plantings. The list of projects shall contain names and phone numbers of owner's representatives who can verify the Contractor's participation on those projects.

STRUCTURAL SOIL

Scope Of Work. This Work shall consist of furnishing and placing Engineered Soil to meet finish grade elevations as specified on the plans or herein and be performed in accordance with Section 310 of the Standard Specifications and US Patent #5,849,069 for 'CU-Structural Soil ™' (see material specification), except as herein modified.

Structural soil is designed to function as a sub-base material under sidewalk and pavement, as well as a growing media outside the tree pits. Contractor shall coordinate placement of structural soil with tree protection, sidewalk construction and utility placements. Coordinate with engineering drawings.

walls; shoring and bracing; dewatering of installation pits; auguring/boring/jacking of new service line, disconnection of existing water services from existing water main and extending new services from the new water main to the new service box to be installed in the parkway; new curb boxes, couplings, fittings, joint materials, corporation stops, tapping saddles, curb stops, service piping, and buffalo boxes; machine tapping of holes into new water main; supply granular backfill material, granular backfill placement, compaction and compaction testing; disinfection; testing; correction of defects; any required adjustments per the ENGINEER; furnishing and installation insulation board; and other related work required to complete the installation which is not included under other Payment Items. Additionally, for WATER SERVICE 4 inches or greater, the price shall also include all tees (no tapping saddles allowed) and two (2) 4-inch or greater resilient wedge type valves and valve boxes per each long service, and one (1) 4-inch or greater resilient wedge type valve and valve box per each short service to match the diameter of the new service. Services less than or equal to 1 inch shall be replaced with a 1-inch diameter minimum service. Services less than or equal to 2 inches and greater than or equal to 4 inches shall be replaced with the same diameter as the existing service. Existing services greater than 2 inches and less than 4 inches shall be replaced with 4-inch services.

WATER VALVES

Description. This work shall consist of furnishing and installing gate valves of the size and type specified at the locations indicated on the plans or directed by the ENGINEER in accordance with the following provisions and the standard specifications.

Materials. All gate valves shall be resilient wedge type. Water gate valve shall be iron body, fully bronze mounted, and of ample strength to withstand and operate satisfactorily under 200 psi cold water working pressure, and shall be subjected to a 300 psi by hydrostatic test pressure, made in the shop. Water gate valves shall be mechanical joint and shall equal or exceed the requirements of the American Water Works Association. All valves shall be of non-rising stem type and shall be equipped with two-inch (2") square operating nuts. All valves shall open to the left or counterclockwise and shall conform to AWWA C-515 Series 2500 Waterous or Mueller A-2360 with stainless steel trim bolts, and ASTM D-429 for the rubber to metal bond on the cast iron wedge. Gates will be epoxy impregnated in accordance with AWWA C550. Cathodic anodes shall be included for all valves. Mechanical joint bolts shall be weather resistant steel meeting the requirements for ASTM A242-HSLA, SS304 and SS316.

Method of Measurement and Basis of Payment. This work shall be paid for at the contract unit price per EACH for WATER VALVES of the respective size listed in the "bidding schedule", which price shall be payment in full for all work as specified.

1

WATERSHED MANAGEMENT PERMIT

Watershed Management Permit No. 20-005

METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO
111 EAST ERIE, CHICAGO, ILLINOIS, 60611

www.mwrd.org

INSTRUCTIONS FOR COMPLETING PERMIT FORM: Submit two original signed copies of this permit application (nine pages) and any required WMO schedules listed below; do not leave any blank spaces; use "X" for checking applicable information. Also submit two copies of location map and plans. Address all correspondence to the Local Sewer Systems Section; for any inquiries or assistance, telephone (312) 751-3255.

NAME AND LOCATION:

Name of Project (as shown on plans): FAU 1296 (Central Avenue) Reconstruction

Location of Project (street address or with respect to two major streets): Union Pacific Railroad to Sheridan Road

Municipality (Township, if unincorporated) Village of Wilmette

Section 34 & 35, Township 42 N, Range 13 E

PIN (include all PINs for project, use additional sheets if more than two): - - - - ; - - - -

Check type of sewer area for project: ■ Combined Sewer Area ☐ Separate Sewer Area

■	Project Information (Required in all cases)	WMO Schedule A	(Page 5 of 9)
■	Sewer Summary (Required in all cases)	WMO Schedule B	(Page 6 of 9)
■	Sewer Connections (Required in all cases)	WMO Schedule C	(Page 7 of 9)
☐	Detention & Stormwater Management Facilities (WMO)	WMO Schedule D	(3 Pages)
☐	Detention & Stormwater Management Facilities (Legacy)	WMO Schedule D_{Legacy}	(4 Pages)
☐	Lift Station and/or Force Main	WMO Schedule E	(2 Pages)
☐	Characteristics of Waste Discharge	WMO Schedule F	(2 Pages)
☐	Treatment or Pretreatment Facilities	WMO Schedule G	(2 Pages)
☐	Hazard Areas (Floodplain / Floodway /Riparian Areas)	WMO Schedule H	(2 Pages)
☐	Affidavit Relative to Compliance with Article 7	WMO Schedule J	(1 Page)
☐	Affidavit of Disclosure of Property Interest	WMO Schedule K	(2 Pages)
☐	Notice of Requirements for Storm Water Detention	WMO Schedule L	(2 Pages)
☐	Current Survey of Property Interests (Attachment for Schedule K or L)	Exhibit A	
☐	Outfall, Direct Connection, District Owned or Leased Property	WMO Schedule O	(1 Page)
■	Soil Erosion and Sediment Control	WMO Schedule P	(2 Pages)
☐	Recording and Maintenance	WMO Schedule R	(2 Pages)
☐	Recording Exhibit (Attachment for Schedule K or L)	Exhibit R	
☐	Wetlands and Wetland Buffer Areas	WMO Schedule W	(2 Pages)

Refer to Table 1 of § 201 of Article 2 of Watershed Management Ordinance for applicable Permitting Authority.

OTHER DOCUMENTS: Indicate title, number of pages and originator

Plans (56 sheets) and Special Provisions (XX Sheets)

NOTE: ATTACH FEE PAYMENT VOUCHER AND PAYMENT IF APPLICABLE

DISTRICT USE ONLY

Application received: ~~1/29/2005~~ 1/29/2020 WMO Permit issued: 4/15/2020 WRP: O'Brien

Issued by: X ☐ DISTRICT ☐ Authorized Municipality

1/17

Added 6/4/20

1

SPECIAL CONDITIONS FOR MWRD PERMIT NO. 20-005

Special Conditions for MWRD Permit 20-005

1. This permit was issued electronically by the District during the COVID-19 pandemic.
2. Construction must conform to the soil erosion and sediment control requirements of this permit and any other local, state, and/or federal agencies.
3. This permit is issued for qualified sewer construction only.
4. All abandoned combined sewers shall be plugged at both ends with at least 2 feet long non-shrink concrete or mortar plugs.

1

SPECIAL CONDITIONS

Watershed Management Permit No. 20-005

This Permit is issued subject to the General Conditions and the attached Special Conditions.

If Permit is granted:

☐ **Please return two (2) copies of the Permit to the Permittee; or**
☒ **Please mail one (1) copy to Permittee and one (1) copy to the person designated below:**

Name: David W. Block - TranSystems Corporation

Address : 1475 East Woodfield Road, Suite 600, Schaumburg, IL 60173
Email : dwblock@transystems.com

CERTIFICATE BY APPLICANTS: We have read and thoroughly understand the conditions and requirements of this Permit application, and agree to conform to the Permit conditions and other applicable requirements of the District. It is understood that construction hereunder, after the Permit is granted, shall constitute acceptance by the applicants of any Special Conditions that may be placed hereon by the District or an Authorized Municipality. It is further understood that this application shall not constitute a Permit until it is approved, signed and returned by the Director of Engineering of the District or Enforcement Officer of an Authorized Municipality.

PERMITTEE	**CO-PERMITTEE**
The project area is within municipal corporate limits. ☒ Yes ☐ No ☐ Not Applicable	**(Co-Permittee is Property Owner)** Title to property is held in a land trust: ☐ Yes ☐ No If yes, Co-Permittee shall be beneficiary with Power of Direction
Municipality: Village of Wilmette	Owner:
Address: 1200 Wilmette Avenue	Address:
City: Wilmette Zip: 60091	City: Zip:
Signature:	Signature:
Name: Daniel Manis, P.E. (Print)	Name: (Print)
Title: Village Engineer	Title:
Date: 12/20/19 Phone: 847-853-7602	Date: Phone:
Email: manisd@wilmette.com	Email:

REVIEW AND APPROVAL BY THE DISTRICT OR AUTHORIZED MUNICIPALITY

Reviewed by: Peter Monko via email (Local Sewer Systems) or (Professional Engineer) **Date** 4/10/2020

Approved for Issue
Approved by: David M Foltz (For the Director of Engineering) or (Enforcement Officer) **Date** 4/15/2020

Electronic approval due to COVID-19 remote work

6/17

Added 6/4/20

256C

GROOVING FOR RECESSED PAVEMENT MARKINGS (BDE)

Effective: November 1, 2012
Revised: November 1, 2017

Description. This work shall consist of grooving the pavement surface in preparation for the application of recessed pavement markings.

Equipment. Equipment shall be according to the following.

(a) Preformed Plastic Pavement Marking Installations. The grooving equipment shall have a free-floating saw blade cutting head equipped with gang-stacked diamond saw blades. The diamond saw blades shall be of uniform wear and shall produce a smooth textured surface. Any ridges in the groove shall have a maximum height of 15 mils (0.38 mm).

(b) Liquid and Thermoplastic Pavement Marking Installations. The grooving equipment shall be equipped with either a free-floating saw blade cutting head or a free-floating grinder cutting head configuration with diamond or carbide tipped cutters and shall produce an irregular textured surface.

CONSTRUCTION REQUIREMENTS

General. The Contractor shall supply the Engineer with a copy of the pavement marking material manufacturer's recommendations for constructing a groove.

Pavement Grooving Methods. The grooves for recessed pavement markings shall be constructed using the following methods.

(a) Wet Cutting Head Operation. When water is required or used to cool the cutting head, the groove shall be flushed with high pressure water immediately following the cut to avoid build up and hardening of slurry in the groove. The pavement surface shall be allowed to dry for a minimum of 24 hours prior to the final cleaning of the groove and application of the pavement marking material.

(b) Dry Cutting Head Operation. When used on HMA pavements, the groove shall be vacuumed or cleaned by blasting with high-pressure air to remove loose aggregate, debris, and dust generated during the cutting operation. When used on PCC pavements, the groove shall be flushed with high pressure water or shot blasted to remove any PCC particles that may have become destabilized during the grooving process. If high pressure water is used, the pavement surface shall be allowed to dry for a minimum of 24 hours prior to the final cleaning of the groove and application of the pavement marking material.

Pavement Grooving. Grooving shall not cause ravels, aggregate fractures, spalling or disturbance of the joints to the underlying surface of the pavement. Grooves shall be cut into

the pavement prior to the application of the pavement marking material. Grooves shall be cut such that the width is 1 in. (25 mm) greater than the width of the pavement marking line as specified on the plans. Grooves for letters and symbols shall be cut in a square or rectangular shape so that the entire marking will fit within the limits of the grooved area. The position of the edge of the grooves shall be a minimum of 2 in. (50 mm) from the edge of all longitudinal joints. The depth of the groove shall not be less than the manufacturer's recommendations for the pavement marking material specified, but shall be installed to a minimum depth of 110 mils (2.79 mm) and a maximum depth of 200 mils (5.08 mm) for pavement marking tapes thermoplastic markings and a minimum depth of 40 mils (1.02 mm) and a maximum depth of 80 mils (2.03 mm) for liquid markings. The cutting head shall be operated at the appropriate speed in order to prevent undulation of the cutting head and grooving at an inconsistent depth.

At the start of grooving operations, a 50 ft (16.7 m) test section shall be installed and depth measurements shall be made at 10 ft (3.3 m) intervals within the test section. The individual depth measurements shall be within the allowable ranges according to this Article. If it is determined the test section has not been grooved at the appropriate depth or texture, adjustments shall be made to the cutting head and another 50 ft (16.7 m) test section shall be installed and checked. This process shall continue until the test section meets the requirements of this Article.

For new HMA pavements, grooves shall not be installed within 10 days of the placement of the final course of pavement.

Final Cleaning. Immediately prior to the application of the pavement marking material or primer sealer, the groove shall be cleaned with high-pressure air blast.

Method of Measurement. This work will be measured for payment in place, in feet (meter) for the groove width specified.

Grooving for letter, numbers and symbols will be measured in square feet (square meters).

Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for GROOVING FOR RECESSED PAVEMENT MARKING of the groove width specified, and per square foot (square meter) for GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS AND SYMBOLS.

The following shall only apply when preformed plastic pavement markings are to be recessed:

Add the following paragraph after the first paragraph of Article 780.07 of the Standard Specifications.

"The markings shall be capable of being applied in a grooved slot on new and existing portland cement concrete and HMA surfaces, by means of a pressure-sensitive, precoated adhesive, or liquid contact cement which shall be applied at the time of installation. A primer sealer shall be applied with a roller and shall cover and seal the entire bottom of the groove.

The primer sealer shall be recommended by the manufacturer of the pavement marking material and shall be compatible with the material being used. The Contractor shall install the markings in the groove as soon as possible after the primer sealer cures according to the manufacturer's recommendations. The markings placed in the groove shall be rolled and tamped into the groove with a roller or tamper cart cut to fit the groove and loaded with or weighing at least 200 lb (90kg). Vehicle tires shall not be used for tamping. The Contractor shall roll and tamp the material with a minimum of 6 passes to prevent easy removal or peeling."

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